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A SHORT
DISCOURSE
CONCERNING
Pestilential Contagion,
OR THE
PLAGUE,
WITH THE
METHODS
To be used to prevent it,

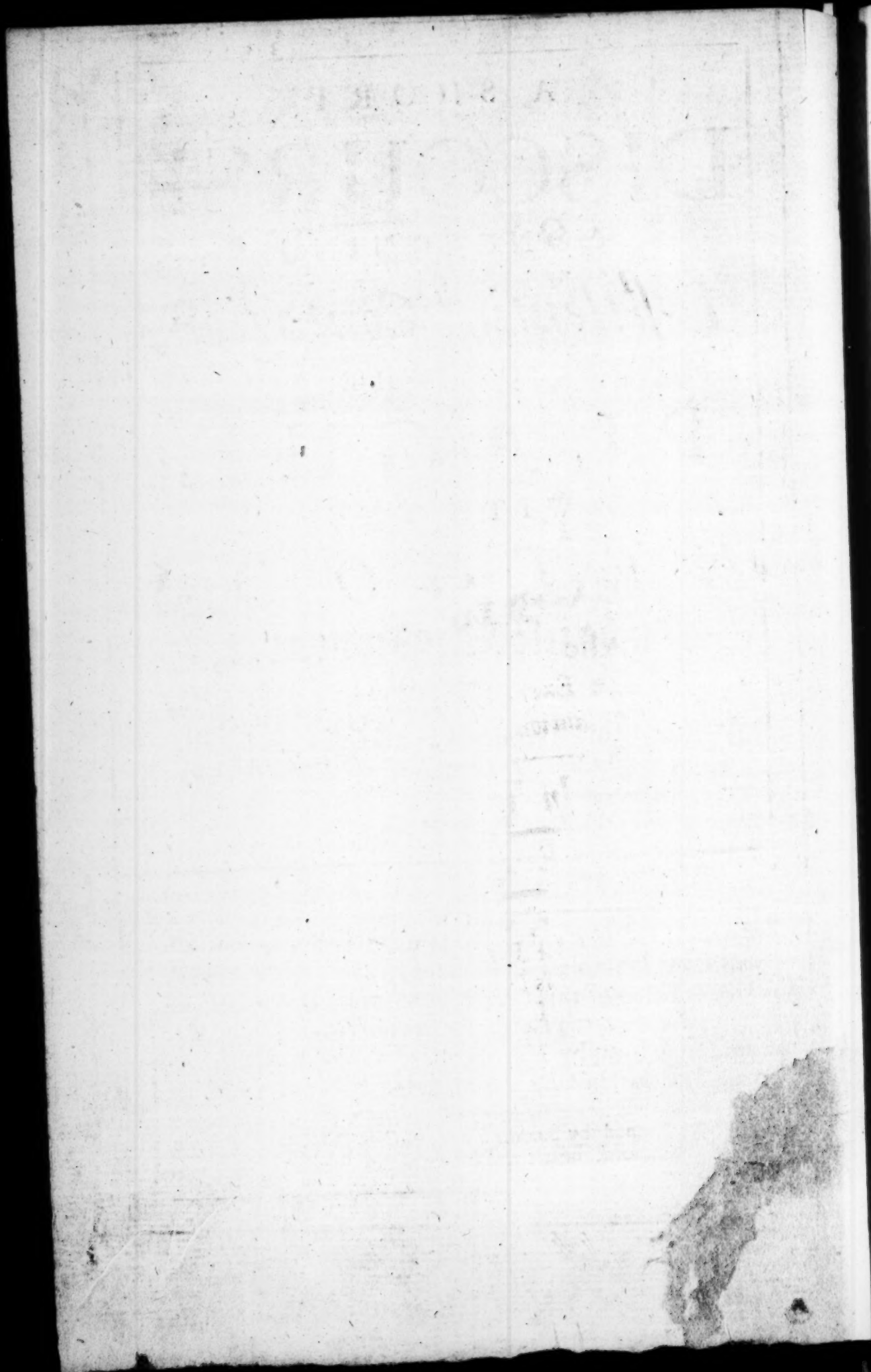
As well by the *Diligence* of the Civil Magistrate, in the *Execution* of his Office, as by the *Care*, and *Caution*, of every particular Person.

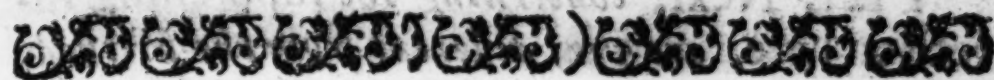
In Two Parts.

By R. MEAD M.D. F.R.S.

N. B. The Doctor, who is deservedly esteem'd One of the ablest Physicians in London, undertook the Writing of this DISCOURSE, at the Desire of their Excellencies, the Lords Justices of Great-Britain, signified to him, by Mr. Secretary Craggs, to whom he address'd it, in a Dedication, dated Nov. 29. 1720.

CORK: Printed by Samuel Terry, in Cock-Pit Lane, for John Redwood, near the Exchange. MDCCXXI.





TO THE
 RIGHT HONOURABLE
JAMES CRAGGS, Esq;
 ONE OF
 His MAJESTY's Principal Secretaries
 of State.

S I R,

I Most humbly offer to You my Tho'ts concerning the Prevention of the Plague, which I have put together by your Command. As soon as you was pleased to signify to me, in His Majesty's Absence, that their Excellencies, the Lords Justices tho't it necessary for the Publick Safety, upon the Account of the Sickness now in France, that proper Directions should be drawn up to defend our selves from such a Calamity; I most readily undertook the Task, tho' upon short Warning, and with little Leisure: I have therefore rather put down the Principal Heads of Caution, than a Set of Directions in Form.

THE First, which relate to the performing Quarentines, &c. You, who are perfectly versed in the History of Europe, will see are agreeable to what is practised in other Countries, with some new Regulations.

iv DEDICATION.

THE Next, concerning the suppressing Infection here, are very different from the Methods taken in former Times among Us, and from what they commonly Do Abroad: But, I persuade my self, will be found agreeable to Reason.

I most heartily wish, that the wise Measures, the Government has already taken, and will continue to take, with regard to the Former of these, may make the Rules about the Latter unnecessary: However it is fit we should be always provided with proper Means of Defence against so terrible an Enemy.

MAY this short Essay be received as One Instance, among many others, of the Care, you always shew for Your Country; and as a Testimony of the great Esteem, and Respect, with which I have the Honour to be,

S I R,

Your most obedient,

Most humble Servant,

Novemb. 25.
1720.

R. MEAD.

PART



P A R T I.

Of the Nature of Contagion in general.

THE PLAGUE, or PESTILENTIAL CONTAGION, is propagated by these Three Causes, viz. I. *The Air.* II. *Diseased Persons.* III. *Goods transported from infected Places.* And therefore it is necessary to enquire, *First, What Alteration of the Air it is, that makes it Infectious:* And, *Secondly, By what Means it communicates its noxious Qualities to other Bodies, in this manner.*

The ancientest and best Authors of Physick, who lived in a Country more exposed to these Calamities than ours, observed the Constitution of the *Air*, which preceded *Pestilential Fevers*, to be great *Heats*, attended with much *Rain*, and *Southerly Winds*. And One of them takes Notice, that no other than a *moist* and *hot* Temperament of the *Air*, brings the *Plague*; and that the Duration of this Constitution, is the Measure of the Violence of the Distemper.

The Natural History, of several Countries, confirms this Observation; in *Africa*, particularly, if Showers fall during the sultry Heats of *July*, and *August*, the *Plague* ensues thereupon, with which whosoever is infected, hardly escapes.

It has besides been remarked, in all Times, that the Stinks of *stagnated Waters*, in hot Weather, *pestilent Exhalations* from the Earth; and above all, the

Corruption of Dead Carcasses, lying unburied, have occasioned *Infectious Diseases*.

From hence it appears to be a *Concurrence* of *Causes* that produces *Diseases* of this Kind ; which must not only meet, but exert their Force together for a considerable Time. And when this happens, their first Effect is a Degree of *Stagnation* in the Air, which is afterwards followed by *Corruption*, and *Putrefaction*.

And upon this Account it is, that those Countries are chiefly liable to these Calamities, where not only the *Heats* are very great, and the *Weather* continues long in the same State ; but the *Winds*, (the use of which, is, by Motion, to purifie the Air) do not shift and change so often as they do in *Northern Climates*.

Indeed *Plagues* seem to be the growth of the *Eastern* and *Southern Parts* of the World, and to be transmitted from them into colder *Climates*, by the way of *Commerce*. Nor do I think, that in this *Island* particularly, there is any One Instance of a *Pestilential Disease*, amongst us, of great Consequence, which we did not receive from other *infected Places*.

This I the rather mention, because it is a common Opinion, and propagated by Authors of great Name, that we are usually visited with the *Plague*, once in *Thirty*, or *Forty Years* ; which is a mere Fancy, without any Foundation.

On the contrary, tho' we have had several Strokes of this Kind, yet there are Instances of bad *Contagions* from Abroad, being bro't over to us, which have proved less malignant here, by our Air not being disposed to receive such Impressions.

The *Sweating Sickneß*, called the *Sudor Anglicus*, and *Febris Ephemera Britannica*, because it was com-

monly

monly tho't to have taken its Rise here, was most probably of a Foreign Original, and no other than a *Plague*, abated in its Violence, by the mild Temperament of our Climate.

For, as we learn from Histories, that the first Time this was felt here, which was in the Year 1485, it began in the Army with which King Henry VII. came from *France*, and landed in *Wales*; and it was then tho't to have been bro't into *France* from the famous Siege of *Rhodes*, by the *Turks*, Three or Four Years before. And of the Four Returns which this has made since that Time; Two, *viz.* those in the Years 1527, and 1528, may very justly be suspected to have been owing to the *Pestilence*, which at those Times raged in *Italy*, particularly at *Florence*, and *Naples*. And the others were very probably from a *Turkish* Infection.

I call this Distemper a *Plague* with lessen'd Force, because the Symptoms of it were of that Kind, tho' in a less Degree; as great *Faintness*, and *Inquietudes*, *inward Burning*, *Pain in the Head*, a *Dilirium*, &c. All which were accompanied with *profuse Sweats*, and the *Disease* lasted but Twenty four Hours. And tho' for want of Care, and due Management, many died of it; yet, as a learned and wise *Historian*, (the Lord *Verulam*, in his History of *Hen. 7.*) observes, *It appeared rather to be a Surprise of Nature, than obstinate to Remedies, for if the Patient was kept warm, with temperate Cordials, he commonly recovered.*

And I cannot but take Notice, as a Confirmation of what I have advanc'd, that we had here the same kind of *Fever*, in the Year 1712, about the Month of *September*, which was call'd the *Dunkirk Fever*, as being bro't, by our *Soldiers*, from that *Place*; where it was, indeed, a malignant *Disease*, attended with a
Diarrhoea,

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Diarrhæa, Vomiting, &c. and probably had its Original from the *Pestilential Distemper*, which some Time before broke out at *Dantzick*, and *Hamburg*: But with us much more mild, beginning only with a Pain in the Head, and by very easie Means, went off in large *Sweats*, after a Days Confinement.

There being in every Air, a greater Disposition to *Contagion* at one Time than another, we have indeed sometimes felt this Calamity with greater Fury; as particularly the last Time, in the Year 1665; when it continued in this City about Ten Months, and swept away, by Computation, 97306 Persons: But it was generally allowed, that the *Contagion* came by Cotton imported from *Turkey*; and the long Duration of it, may justly be charged upon the unhappy Management of infected Houses, which was then directed by Publick Authority.

And the History of the most terrible of all the Plagues that ever were in these Parts of the World, which was that in the Year 1349, gives a manifest Proof, from whence all *Europe* may trace the Origin of these Evils, *viz.* from *Asia*: For this taking its Rise in *China*, in the Year 1346, advanced thro' the *East-Indies* to *Syria*, *Turkey*, *Egypt*, *Greece*, *Africa*, &c. In 1347, some Ships from the *Levant*, carried it to *Sicily*, *Pisa*, *Genoa*, &c. In 1348, it got into *Savoy*, *Provence*, *Dauphine*, *Catalonia*, *Castile*, &c. In 1349, it seized *England*, *Scotland*, *Ireland*, and *Flanders*; and in the next Place, *Germany*, *Hungary*, and *Denmark*; and in all these Countries made most incredible Havock.

To return to the Consideration of the Air, which we left in a putrid State: It is to be observed, that Putrefaction is a kind of Fermentation, and that all Bodies in a Ferment emit a volatile
active

active Spirit, of Power to agitate, and put into intestine Motions, that is, to change the Nature of other Fluids into which it insinuates it self.

It were easy to shew from the *Theory* of Fevers, how the Alterations made in the *Blood* this way, will favour *Pestilential* Diseases, by rendring the Body obnoxious to them: But the Digression would be too great.

This is one Step towards *Contagion*. The next, as it seems to me, proceeds after this Manner. The Blood, in all *Malignant Fevers*, especially *Pestilential* ones, at the latter End of the Disease, does, like Fermenting Liquors, throw off a great Quantity of active Particles upon the several *Glands* of the Body, particularly upon those of the Mouth and Skin, from which the Secretions are naturally the most constant and large. These, in *Pestilential* Cases, altho' the Air be in a right State, will generally infect those, who are very near to the sick Persons; otherwise are soon dispersed and lost: But when in an evil Disposition of *This*, they meet with the subtle Parts its Corruption has generated, by uniting with them, they become much more active and powerful, and likewise more durable and lasting, so as to form an *Infectious Matter*, capable of conveying the Mischief to a great Distance from the Diseased Body, out of which it was produced.

They who know what strange Attractions and Combinations are made by Volatile Spirits, will understand this Reasoning; especially if they consider, how easily all kinds of *Effluvia* are diffused in a warm Air; and of how penetrating a Force the finest Parts of Animal Juices are; of which the strange Stench of a mortified Limb, upon a Body yet Living, will convince any one.

A corrupted State of Air is, without doubt, necessary to give these *Contagious Atoms* their full Force; for otherwise it were not easy to conceive how the *Plague*, when once it had seized any Place, should ever cease, but with the Destruction of the Inhabitants: Which is readily accounted for, by supposing an Emendation of the Qualities of the Air, and the restoring of it to a healthy State, capable of dissipating and suppressing the Malignity.

On the other Hand it is evident, that *Infection* is not received from the Air it self, however predisposed, without the Concurrence of something emitted from *Infected* Persons; because, by strictly preventing all Intercourse of Infected Places with the Neighbourhood, it may be effectually kept from spreading: Whereas the least Wind must necessarily convey whatever noxious Quality resides in the Air alone, even to a great Distance. Of this we have had a fresh Proof in the present unhappy *Plague* in *France*, which, by keeping careful Guard, was confined for a considerable Time within the Walls of *Marseilles*; till at length some Persons finding Means to escape, carried the Infection along with them.

The Way, by which a sound Person receives the Injury I suppose most commonly to be this. These *Contagious* Particles being drawn in with the Air we breathe, they taint in their Passage the *Salival* Juices, which being swallowed down into the Stomach, presently fix their Malignity there; as appears from the *Nausea* and *Vomiting*, with which the Distemper often begins its first Attacks. Though I make no Question but the *Blood* is also more affected by hurtful Particles being mixed thro' Inspiration with it in the Lungs.

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The Third Way, by which we mentioned *Contagion* to be spread, is by *Goods transported from infectious Places*. It has been tho't so difficult to explain the Manner of *this*, that some Authors have imagined *Infection* to be performed by the Means of *Insects*, the *Eggs* of which may be conveyed from Place to Place, and make the Disease when they come to be *Hatched*. As this is a Supposition grounded upon no Manner of Observation, so I think there is no need to have recourse to it. If, as we have conjectured, the *Matter of Contagion* be an active Substance, perhaps in the Nature of a *Salt*, generated chiefly from the Corruption of a *Human Body*, it is not hard to conceive how this may be lodged and preserved in soft, porous Bodies, which are kept pressed close together.

We all know how long a Time *Perfumes* hold their *Scent*, if wrap'd up in proper Coverings: And it is very remarkable, that the strongest of these, like the *Matter* we are treating of, are mostly *Animal Juices*, as *Mosch*, *Civet*, &c. and that the Substances found most fit to keep them in, are the very same with those which are most apt to receive and communicate *Infection*, as, *Furrs*, *Feathers*, *Silk*, *Hair*, *Wooll*, *Cotton*, *Flax*, &c. the greatest Part of which are likewise of the Animal Kind; which Remark alone may serve to lead us a little into the true Nature of *Contagion*.

From all this appears very plainly, that the *Plague* is a real Poison which being bred in the *Eastern* or *Southern* Parts of the World, maintains it self there, by circulating from *Infected* Persons to Goods; which is chiefly owing to the Negligence of the People in those Countries, who are stupidly careless in this Affair: That when the Constitution of

the Air happens to favour Infection, it rages there with great Violence; That at that Time more especially, diseased Persons give it to one another, and *Contagious Matter* is lodged in Goods of a loose and soft Texture, which being pack'd up, and carried into other Countries, let out, when opened, the imprisoned Seeds of Contagion: And lastly, That the Air cannot diffuse and spread these to any great Distance, if Intercourse and Commerce with the Place infected be strictly prevented.

P A R T II.

The Methods to be used, to prevent Contagion.

AS it is a Satisfaction to know, that the *Plague* is not a Native of our Country, so this is likewise an Encouragement to the utmost Diligence in finding out Means to keep our selves clear from it: Which Caution consists of Two Parts: *The preventing its being bro't into our Island*: And, if such a Calamity should happen, *The putting a Stop to its spreading among us*. The First of these is provided for by the established Method of obliging Ships, that come from infected Places, to perform *Quarentine*: As to which, I think it necessary, that the following Rules be observed.

Near to our several Ports, there should be *Lazaretto's*, built in convenient Places, on little Islands, if it can so be, for the Reception both of Men, and Goods, which arrive from Places suspected of *Infection*: The keeping Men in *Quarentine* on board the Ship being not sufficient; the only Use of which is to observe whether any die among them. For *Infection* may be preserved so long in Cloaths, in which it is once lodged, that as much, nay more
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of it, if Sickness continues in the Ship, may be bro't on Shore at the End, than at the Beginning of the *Forty Days*, unless a new *Quarentine* be begun every Time any Person dies, which might not end, but with the Destruction of the whole Ships Crew.

If there has been any *Contagious Distemper* in the Ship; the *Sound Men* shou'd leave their Cloaths; which shou'd be burnt; the Men washed, and shaved, and having fresh Cloaths, shou'd stay in the *Lazaretto* 30, or 40 Days. The Reason of this is, because Persons may be recovered from a Disease themselves, and yet retain *Matter of Infection* about them a considerable Time; as we frequently see the *Small Pox* taken from those, who have several Days before passed thro' the Distemper.

The *Sick*, if there be any, shou'd be kept in Houses remote from the *Sound*; and some Time after they are well, wou'd also be washed and shaved, and have fresh Cloaths; whatever they wore while Sick being burnt: And then being removed to the Houses of the *Sound*, should continue there 30 or 40 Days.

I am particularly careful to destroy the Cloaths of the Sick, because they harbour the very *Quintessence* of *Contagion*. A very ingenious Author* in his admirable Description of the *Plague* at *Florence*, in the Year 1348, relates what himself saw; That Two *Hogs* finding in the Streets the *Rags*, which had been thrown out from off a poor Man, dead of the Disease, after snuffling upon them, and tearing them with their Teeth, fell into Convulsions, and died in less than an Hour.

* Boccaccio Decameron, Giornata prima,

If there has been no Sickness in the Ship, I see no reason why the Men shou'd perform *Quarentine*. Instead, of this, they may be washed, and their Cloaths aired in the *Lazaretto*, as Goods, for one Week.

But the greatest Danger is from such Goods, as are apt to retain Infection, such as Cotton, Hemp, and Flax, Paper, or Books, Silk of all Sorts, Linnen, Wooll, Feathers, Hair, and all Kinds of Skins. The *Lazaretto* for these, shou'd be at a Distance from that for the Men, and they must, in convenient Ware-houses, be unpack'd, and exposed, as much as may be, to the fresh Air, for 40 Days.

This may, perhaps, seem too long; but as we don't know how much Time precisely is necessary to purge the Interstices of spongy Substances from *Infectious Matter*, by fresh Air, the Caution cannot be too great in this Point: Unless there could be a Way found out, without hazarding Mens Lives, of trying when Bodies have done emitting the noxious Fumes; which possibly might be done by putting tender *Animals* near to them, particularly by setting little *Birds*, upon the exposed Goods; because it has been observed in Times of the *Plague*, that the Country has been forsaken by the *Birds*; and those kept in Houses have many of them dy'd. But the Use of this Fancy Experience only must shew; for I am well aware, that all *Plagues* do not indifferently affect all Kinds of living Creatures; on the contrary, most are confined to a particular *Species* of them; like the Disease of the *Black Cattle*, a few Years since, which neither proved infectious to other Brutes, nor to Men.

I take it for granted, that the Goods shou'd be open'd, when they are put into the *Lazaretto*, otherwise

wife their being there will avail nothing. The Misfortune, which hapned in the *Island of Bermudas*, about 25 Years since, gives a Proof of this; where, as the Account has been given me, by the learned Dr. *Halley*, a Sack of Cotton, put on Shore, by stealth, lay above a Month, without any prejudice to the People of the House, where it was hid, but when it came to be distributed among the Inhabitants, it carried such a *Contagion* along with it, that the Living scarce sufficed to bury the Dead.

Indeed, as it has been frequently experienc'd, that of all the Goods which harbour *Infection*, Cotton in particular is the most dangerous, and *Turkey* is almost a perpetual *Seminary* of the *Plague*; I cannot but think it highly reasonable, that whatever Cotton is imported from that Part of the World, should at all Times be kept in *Quarentine*; because it may have imbibed *Infection* at the Time of its packing up, notwithstanding no Mischief has been felt from it by the Ship's Company.

As all reasonable Provisions should be made both for the Sound and Sick, who perform *Quarentine*; so the strict keeping of it ought to be enforced by the severest *Penalties*. And if a Ship come from any Place, where the *Plague* raged, at the Time of the Ship's Departure from it, with more than usual Violence, it will be the securest Method to Burn all the Goods, and even the Ship.

Nor ought this further Caution to be omitted, That when the *Contagion* has ceased in any Place, by the approach of Winter, it will not be safe to open a free Trade with it too soon: Because there are Instances of the *Distemper's* being stopt by the Winter Cold, and yet the Seeds of it not destroyed, but only kept unactive, till the Warmth of the
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following Spring has given them new Life and Force. Thus in the great *Plague* at *Genoa*, near 60 Years ago, which continued Part of 2 Years; the first Summer about 10000 died; the Winter following hardly any; but the Summer after, no less than 60000. So likewise the last *Plague* at *London*, began the Autumn before the Year 1665, and was stopt during the *Winter*, by a hard Frost of near 3 Month's continuance; so that there remained no further Appearance of it 'till the ensuing *Spring*. Now if Goods bro't from such a Place should retain any of the latent Contagion, there will be danger of their producing the same Mischief in the Place, to which they are bro't, as they would have caused in that, from whence they came.

But above all it is necessary, that the *Clandestine Importing* of Goods be punished with the utmost Rigour; from which wicked Practice I should at this Time apprehended more Danger of bringing the *Disease* from *France*, than by any other Way whatsoever.

These are, I think, the most material Points, to which Regard is to be had in defending our selves against *Contagion* from other Countries. The particular Manner of putting these Directions in Execution, as the *Visiting* of *Ships*, *Regulation* of *Lazaretto's*, &c. I leave to proper Officers, who ought sometimes to be assisted herein by able Physicians.

The next Consideration is, What to do in Case, thro' a Miscarriage in the publick Care, by the Neglect of Officers, or otherwise, such a Calamity should be suffered to befall us.

There is no *Evil* in the World, in which the great Rule of *Resisting the Beginning*, more properly takes place, than in the present Case; and yet it has un-
fortun-

Fortunately happened, that the common Steps, formerly taken have had a direct Tendency to hinder the putting *this Maxim* in Practice.

As the *Plague* always breaks out in some particular Place, it is certain, that the Directions of the *Civil Magistrate* ought to be such, as to make it as much for the Interest of Families to discover their Misfortune, as it is, when a House is on *Fire*, to call in the Assistance of the Neighbourhood: Whereas, on the contrary, the Methods taken by the Publick, on such Occasions, have always had the Appearance of a severe *Discipline*, and even *Punishment*, rather than of a *Compassionate Care*: Which must naturally make the *Infected* conceal the Disease as long as was possible.

The main Import of the *Orders* issued out at these Times was, As soon as it was found, that any House was infected, to keep it shut up, with a *large red Cross*, and *Lord have Mercy upon us* on the Door; and Watchmen attending Day and Night to prevent any one's going in or out, except *Physicians, Surgeons, Apothecaries, Nurses, Searchers, &c.* allowed by Authority: And this to continue at least a Month after all the Family was *dead* or *recovered*.

It is not easy to conceive a more dismal Scene of Misery, than this; Families seized with a Distemper, which the most of any in the World requires Help and Comfort, lockt up from all their Acquaintance; left it may be to the Treatment of an inhuman Nurse (for such are often found at these Times about the Sick;) and Strangers to every thing but the *Melancholy* sight of the Progress, Death makes among themselves; with small Hopes of Life, and those mixed with Anxiety and Doubt, whether

whether it be not better to Dye, than to survive the Loss of their best Friends, and nearest Relations.

If *Fear, Despair*, and all *Dejection of Spirits* dispose the Body to receive *Contagion*, and give it a great Power, where it is received, as all Physicians agree they do, I don't see how a Dileale can be more enforced, than by such a Treatment.

Nothing can justify such Cruelty, but the Plea, that it is for the Good of the whole Community, and prevents the spreading of *Infection*. But this upon due Consideration will be found quite otherwise: For while *Contagion* is kept nursed up in a House, and continually increased by daily Conquests it makes, it is impossible but the Air should by Degrees become tainted, which by opening Windows, &c. will carry the Malignity first from House to House; and then from one Street to another. The shutting up Houses in this manner is only keeping so many *Seminaries of Contagion*, sooner or later to be dispersed abroad: For the waiting a Month, or longer, from the Death of the last Patient will avail no more, than keeping a Bale of infected Goods unpack'd; the Poyson will fly out, whenever the *Pandora's Box* is opened.

As these Measures were owing to the Ignorance of the true Nature of *Contagion*, so they did, I firmly believe, contribute very much to the long Continuance of the *Plague*, every time they have been practised in this City: And no doubt they have had as ill Effects in other Countries.

It is therefore no wonder, that great Complaints were sometimes made here against this unreasonable Usage; which, when they prevailed so far, as to procure some release for the sick, were remarkably

followed with an Abatement of the Disease. The *Plague* in the Year 1636 began with great Violence, but Leave being given by the King's Authority for People to quit their Houses; it was observed, That *not one in twenty of the well Persons removed fell Sick, nor one in ten of the Sick dyed.* Which single Instance alone, had there been no other, should have been of Weight ever after to determine the Magistracy against too strict Confinements. But besides this, a preceeding *Plague*, viz. in the Year 1625, affords us another Instance of a very remarkable Decrease upon the discontinuing to shut up Houses. It was indeed so late in the Year, before this was done, that the near Approach of Winter was doubtless one Reason for the Diminution of the Disease, which followed: Yet this was so very great, that it is at least past dispute, that the Liberty then permitted was no Impediment to it: For this opening of the Houses was allowed of in the beginning of September; and whereas the last Week in August, there dyed no less than 4218, the very next Week the Burials were diminished to 3344, and in no longer time than to the fourth Week after, to 852.

Since therefore the Management in former Times neither answers the Purpose of *discovering the Beginning* of the Infection, nor of putting a stop to it when *Discovered*, other Measures are certainly to be taken; which I think should be of this Nature.

Instead of *ignorant old Women*, who are generally appointed *Searchers* in Parishes to enquire what Diseases People dye of, That Office should be committed to *Understanding and Diligent Men*, whose Business it should be, as soon as they find any have
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dyed

dyed after an uncommon Manner, particularly with *livid Spots, Buboës, or Carbuncles*, to give Notice thereof to the Magistrates; who should immediately send skilful Physicians to Visit the Houses in the Neighbourhood, especially of the *Poorer* sort, among whom this Evil generally begins; and if upon their Report it appears, that a *Pestilential Distemper* is broke out among the Inhabitants, they should without delay order all the Families, in which the Sickness is, to be removed; the Sick to different Places from the *Sound*; but the Houses for both should be 3 or 4 Miles out of Town; and the *Sound People* should be *stript of all their Cloaths*, and *washed, and shaved*, before they go into *new Lodgings*.

No manner of *Compassion* and *Care* should be wanting to the *Diseased*; to whom, being now in *clean and airy Habitations*, there would, with due *Cautions*, be no great danger in giving Attendance. All Expences should be paid by the Publick, and no Charges ought to be tho't great, which are counterbalanced with the saving a Nation from the greatest of *Calamities*. Nor does it seem to me at all unreasonable, that a *Reward* should be given to the Person, that makes the first Discovery of *Infection* in any Place; since it is undeniable, that the making known the *Evil* to those, who are provided with proper Methods against it, is the first and main Step towards the overcoming it.

When the *Sick Families* are gone, all the Goods of the Houses, in which they were, should be *burnt*; nay the Houses themselves, if that can conveniently be done. And after this, all possible Care ought still to be taken to remove whatever Causes are found to breed and promote *Contagion*. In order to this,

this, the *Overseers* of the Poor, (who might be assisted herein, by other *Officers*) should visit the *Dwellings* of all the meaner Sort of the *Inhabitants*, and where they find them *stifled up too close*, and *nasty*, should lessen their number, by sending some into better Lodgings, and should take Care, by all manner of Provision, and Encouragement, to make them more *cleanly* and *sweet*.

No good Work carries its own Reward with it, so much as this kind of *Charity*.; and therefore be the Expence what it will, it must never be tho't unreasonable. For nothing approaches so near to the first Original of *Contagion*, as Air pent up, loaded with Damps, and corrupted with the Filthiness, that proceeds from *Animal Bodies*.

Our common *Prisons* afford us an Instance of this, in which very few escape, what they call the *Goal Fever*, which is always attended with a Degree of *Malignity*, in proportion to the *Closeness* and *Stench* of the Place: And it would certainly very well become the Wisdom of the Government, as well with regard to the Health of the *Town*, as in Compassion to the *Prisoners*, to take Care, that all *Houses of Confinement* should be kept as Airy and Clean, as is consistent with the Use, to which they are designed.

The *Black Affize*, at *Oxford*, held in the *Castle* there, in the Year 1577, will never be forgot*; at which the *Judges*, *Gentry*, and almost all that were present, to the number of 300, were killed by a *poysinous Steam*. tho't by some to have broke forth from the *Earth*; but by a noble and great Philosopher †, more justly supposed to have been bro't by

* *Camden. Annal. Regin. Elizab.*

† *Lord Virulam, Nat. Hist. Cent. 10. N^o. 914.*

the Prisoners out of the Goal into Court; it being observed, that they alone were not injured by it.

At the same Time that this Care is taken of Houses, the proper Officers should be strictly charged to see that the Streets be washed and kept clean from Filth, Carrion, and all manner of Nuisances; which should be carried away in the Night Time; nor should the Laystalls be suffered to be too near the City. Beggars, and idle Persons should be taken up, and such miserable Objects, as are neither fit for the common Hospitals, nor Work-houses, shou'd be provided for in an Hospital of Incurables.

Orders indeed of this kind are necessary to be observed at all Times, especially in populous Cities; and therefore I am sorry to take notice, that in these of London, and Westminster, there is no good Police established in these Respects; for want of which the Citizens and Gentry are every Day annoyed more ways than one.

If these early Precautions, we have mentioned, take effect, there will be no need of any Methods for Correcting the Air; Purifying Houses, or of Rules for preserving particular Persons from Infection: To all which, if the Plague get Head, so that the Sick are too many to be removed, regard must be had,

As to the First; Fire has been almost universally recommended for this purpose, both by the Ancients and Moderns; who have advised to make frequent and numerous Fires in the Towns infected: By which Means, it is said, Hippocrates preserved Greece from a Plague, which was entering into it from Ethiopia. And it is certain, that some evil Dispositions of the Air, particularly such as proceed from Damps, Exhalations, &c. may be corrected by Fire, and the Predisposition of it to receive Infection from these Causes, some-

sometimes removed. But when the *Distemper* is actually *begun*, and rages, since it is known to be *spread* and *increased* by the *Heat* of the *Summer*, and on the contrary checked by the *Cold* in *Winter*; undoubtedly, whatever increases that *Heat* will so far add Force to the Disease. Whether the *Service Fires* may do by correcting any other ill Qualities of the Air will counterballance the Inconvenience upon this Account, Experience only can determine; and the fatal Success of the Tryals made here in the last *Plague*, is more than sufficient to discourage any further Attempts of this Nature; for *Fires* being order'd in all the *Streets* for 3 Days together, there died in one Night following, no less than 4000; whereas in any single Week before, or after, not much above three times that number were carried off.

What has been said of *Fires*, is likewise to be understood of *firing of Guns*, which some have too rashly advised. The proper *Correction* of the *Air* would be to make it *fresh* and *cool*. Accordingly the *Arabians*, who were best acquainted with the *Nature* of *Pestilences*, advise People to keep themselves as *airy* as possible, and to chuse *Dwellings* exposed to the *Wind*.

For keeping *Houses* cool, they took to be the best Method of *purifying* them; and therefore to answer this End more fully, they directed to strew them with *cooling Herbs*, as *Roses*, *Violets*, *Water-Lillies*. &c. and to be washed with *Water* and *Vinegar*; than all which, especially the last, nothing more proper can be proposed: Tho' it be directly contrary to what *modern Authors* mostly advise, which is to make Fumes with hot Things, as *Benzoin*, *Frankincense*, *Asa Fœtida*, *Storax*, &c. from which I see no reason to expect any *Virtue* to destroy the *Matter* of *Infecti-*

on, or to keep particular Places from a Disposition to receive it; which are the only Things here to be aimed at. It is of more Consequence to be observed, that as *Nastiness* is a great Source of *Infection*, so *Cleanliness* is the greatest *Preservative*: Which is the true Reason, why the Poor are most obnoxious to Disasters of this Kind.

The next Thing after the *purifying of Houses*, is to consider by what Means *particular Persons* may best defend themselves against *Contagion*; for the effectual doing of which it would be necessary to put the *Humours* of the *Body* into such a State, as not to be alterable by the *Matter of Infection*. But since this is no more to be hoped for, than a *Specific Preservative* from the *Small-Pox*; the most that can be done, will be to keep the *Body* in such Order, that it may suffer as little as possible. The *First Step* towards which, is to maintain a good State of Health, in which we are always least liable to suffer by any external Injuries; and not to weaken the Body by Evacuations. The Next is, to guard against all *Dejection of Spirits*, and *immoderate Passions*; for these we daily observe, do expose Persons to the more common *Contagion* of the *Small Pox*. These Ends will be best answered by living with Temperance, upon a good generous Diet, and avoiding *Fastings*, *Watchings*, *extreme Weariness*, &c. Another Defence is, to use whatever Means are proper to keep the *Blood* from *inflaming*. This, if it does not secure from *contracting Infection*, will at least make the *Effects* of it less violent. The most proper Means for this, according to the Advice of the *Arabian Physicians*, is the repeated use of *acid Fruits*, as *Pomegranates*, *Sevil Oranges*, *Lemons*, *tart Apples*, &c. But above all of *Wine-Vinegar*, in small Quantities, rendred grateful to the
Stomach,

Stomach, by the Infusion of some such Ingredients; as *Gentian-Root, Galangal, Zedoary, Juniper-Berries, &c.* Which Medicines, by correcting the *Vinegar*, and taking off some ill Effects it might otherwise have upon the Stomach, will be of good use: But these, and all other *hot Aromatic Drugs*, tho' much recommended by *Authors*, if used alone, are most likely to do hurt by *over-heating the Blood*.

But since none of these Methods promise any certain Protection; as *leaving the Place infected* is the surest *Preservative*, so the next to it, is to avoid, as much as may be the *near Approach* to the *Sick*, or to such as have but *lately recovered*. For the greater Security herein, it will be adviseable to avoid all *Crouds of People*: Nay, it shou'd be the Care of the *Magistrate*, to prohibit all *unnecessary Assemblies*, and likewise to oblige all, who get over the *Disease*, to *confine themselves* for some Time, before they appear abroad.

The Advice to keep at a distance from the *Sick*, is also to be understood of the *Dead Bodies*; which shou'd be buried at as great a Distance from *Dwelling Houses*, as may be; put *deep* in the Earth, and *covered* with the exactest Care. They should likewise be *carried out* in the *Night*, while they are yet fresh, and free from Putrefaction: Because a *Carcase* not yet beginning to corrupt, if kept from the Heat of the Day, hardly emits any kind of *Steam*, or *Vapour*.

As for those, who must of necessity attend the *Sick*, some further Directions should be added for their use. These may be comprehended in *Two short Precepts*. One is, not to *swallow their Spittle* while they are about the *Sick*, but rather to *spit it out*: The other, not so much as to *draw in their Breath*, when they are

are very near them. The Reason for both these appears from what has been said above, concerning the Manner, in which a sound Person receives the Infection.

This is the Sum of what I think most likely to stop the Progress of the *Disease* in any *Place*, where it shall have got Admittance. If some few of these *Rules* refer more particularly to the *City of London*, with small Alteration they may be applied to any other *Place*. It now remains therefore only to lay down some *Directions* to hinder the *Distemper's* spreading from *Town to Town*. The best Method for which, where it can be done, is to cast up a *Line* about the *Town infected*, at a convenient Distance; and by placing a *Guard*, to hinder People's passing from it, without due Regulation, to other *Towns*: But not absolutely to forbid any to withdraw 'em-selves, as they have now done in *France*, according to the usual Practice *Abroad*; which is an unnecessary Severity, not to call it a Cruelty. I think it will be enough, if all, who desire to pass the *Line*, be permitted to do it, upon Condition they first perform *Quarentine* for about 20 Days, in *Tents*, or other more convenient *Habitations*. But the greatest Care must be taken, that none pass without conforming themselves to this Order, both by keeping diligent *Watch*, and by punishing with the utmost Severity, any that shall either have done so, or attempted it. And the better to discover such, it will be requisite to oblige all, who travel in any Part of the Country, under the same Penalties, to carry with them *Certificates*, either of their coming from *Places not infected*, or of their passing the *Line* by Permission.

This

This I take to be a more effectual Method to keep the *Infection* from spreading, than the absolute refusing a Passage to People upon any *Terms*. For when Men are in such imminent Danger of their Lives, where they are ; many, no doubt, if not otherwise allowed to escape, will use Endeavours to do it secretly, let the Hazard be ever so great. And it can hardly be, but some will succeed in their Attempts, as we see fell out in *France*, notwithstanding all their Care. But one that gets off thus clandestinely, will be more like to carry the Distemper with him, than 20, nay a 100 that go away under the preceding Restrictions ; especially because the *Infection* of the *Place*, he flies from, will by this Management be rendred much more intense. For confining People, and shutting 'em up together in great numbers, will make the *Distemper* rage with augmented Force, even to the increasing it beyond what can be easily imagined ; as appears from the *Account* which the learned *Gassendus* has given us of a memorable *Plague* which hapned at *Digne* in *Provence*, where he lived, in the Year 1619. This was so terrible, that in one *Summer*, out of 10000 Inhabitants, it left but 1500, and of them all, but 5, or 6 had gone thro' the *Disease*. And he assigns this, as the principal Cause of the great Destruction, That the Citizens were too closely confined, and not suffered so much as to go to their *Country-Houses*. Whereas in another *Pestilence*, which broke out in the same Place a Year and half after, more Liberty being allowed, there did not die above 100 Persons.

For these Reasons, I think, to allow People with proper *Cautions* to remove from an infected Place, is the best Means to suppress the *Contagion*, as well as the most humane Treatment of the pestilence

sent Sufferers : But though Liberty ought to be given to the *People*, yet no sort of *Goods* must by any means be suffered to be carried over the *Line*, which are made of *Materials* retentive of *Infection*. For in the present Case, when *Infection* has seized any Part of a Country, much greater Care ought to be taken, that no *Seeds* of the *Contagion* be conveyed about, than when the Distemper is at a great Distance; because a *Bale of Goods*, which shall have imbibed the *Contagious Aura* when packt up in *Turkey*, or any remote Parts; yet, when unpackt here, may chance to meet with so healthful a Temperament of our Air, that it shall not do much hurt. But when the Air of any one of our Towns shall be so corrupted,, as to spread and maintain the *Pestilence* in it, there will be little reason to believe, that the Air of the rest of the Country is in a much better State.

For the same Reason *Quarentines* should more strictly be enjoined. when the *Plague* is in a bordering Kingdom, than when it is more remote.

I have gone through the chief Branches of *Preservation* against the *Plague*. And shall only add, that if the *Burning of Goods*, which has been proposed, be thought any Way *offensive* or *inconvenient*, The *Burying* of them six feet, or more, under Ground may answer the Purpose as well.

What has been said of the *Nature of Contagion*, upon which the foregoing Directions are grounded, may also be of Use towards establishing a better Method of *Cure*, than *Authors* have commonly taught : But to engage in this is beyond the present Design.

F I N I S.

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